



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,466	08/27/2003	Thomas B. Wise		5368
7590	05/06/2004		EXAMINER	
McCulloch PLC 5291 Colony Drive North Saginaw, MI 48603			O CONNOR, CARY E	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/649,466	WISE	
<b>Examiner</b>	<b>Art Unit</b>		
Cary E. O'Connor	3732		

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 15-19 is/are allowed.
- 6) Claim(s) 1 and 5-14 is/are rejected.
- 7) Claim(s) 2-4 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11-17-03.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pankuch et al (5,733,118) in view of DiMarino et al (2003/0138754). Pankuch shows a dental impression tray comprising a frame having parallel spaced apart limbs, each limb having outer and inner edges, a support 34 spanning the inner edges of the limbs, an upstanding wall 16, 22 adjacent the outer edge of at least one of the limbs, and an elongated projection 42, 54 adjacent the inner edge of the limbs wherein the projection is spaced from the adjacent wall. The projection of Pankuch is a single elongated projection and is not a plurality of projections spaced from one another. DiMarino shows a dental impression tray having a plurality of projections 26 spaced apart from one another. This allows the impression material to flow into the material retention groove (see paragraph 0031). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the projection of Pankuch as a plurality of spaced apart projections, in view of DiMarino, in order to facilitate the flow of the impression material into the retention groove 46, 58. As to claims 6 and 7, note that the wall and projection of Pankuch extends in opposite direction from the limb (see Fig. 2). As to claim 8, note that the support of Pankuch comprises an open mesh netting

(column 2, lines 64-65). As to claims 10 and 11, note that the limbs of Pankuch are connected at one end by a connector 28 which has a thickness less than the limbs. As to claim 13, note the handle 14 of Pankuch. As to claim 14, note Figures 6-8 of Pankuch.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pankuch et al (5,733,118) in view of DiMarino et al (2003/0138754) as applied to claim 1 above, and further in view of Simon et al (6,017,121). The wall of Pankuch does not extend in only one direction from the limb. Simon shows a dental impression tray wherein the outer walls extend in only one direction. This type of tray is used when an impression of only one arch is required. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the impression tray of Pankuch as modified by DiMarino so that it the wall extends in only one direction so that the tray may be used when only an impression of a single arch is required.

***Allowable Subject Matter***

Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-19 are allowed.

***Claim Objections***

Claim 13 objected to because of the following informalities: In line 2, "o" should be changed to --of--. Appropriate correction is required.

***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no antecedent basis in the specification for three parallel limbs (claim 9).

Appropriate correction is required.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-F 7:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 703-308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Application/Control Number:  
10/649,466  
Art Unit: 3732

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

*Cary E. O'Connor*  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo  
April 30, 2004